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Discovery "armed" for winter launch

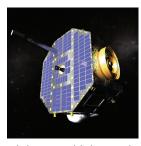
IBEX spacecraft to photograph boundary in space



◆ Shuttle Update: In OPF bay 3 July 1, space shuttle Discovery's robotic arm was installed in the payload bay.

Discovery will carry the S6 truss segment to complete the 361-foot-long backbone of the International Space Station on the STS-119 mission. The truss includes the fourth pair of solar array wings and electronics that convert sunlight to power for the orbiting laboratory. A launch date has not yet been determined.

♦ ELV Update: Solar wind piles up against the gas in interstellar space. This boundary, called the termination shock, marks the beginning of our solar system's final frontier, a vast expanse of turbulent gas and twisting magnetic fields. NASA's new Interstellar Boundary Explorer, or IBEX, spacecraft is targeted for launch on a Pegasus rocket no earlier than Oct. 5 from the Kwajalein Atoll. IBEX will photograph and build up an image of the termination shock and areas beyond by using hits from high-speed atoms that are radiating out of this region.



IBEX needs to go beyond Earth's magnetic field, called the magnetosphere, because this region generates radiation

and the same high-speed atoms, energetic neutral atoms, or ENAs, that IBEX will

use to make its pictures. To avoid contamination from local ENAs produced in the magnetosphere, IBEX's orbit will take it up to 200,000 miles from Earth.

For more information, go to: http://www.nasa.gov/mission_pages/ibe x/IBEXFullFeature.html.

■ NASA News — NASA will host a media teleconference at 2 p.m. today to discuss analysis of data from the Mercury Surface, Space Environment, Geochemistry and Ranging, or MESSENGER, spacecraft's flyby of Mercury in 2008.

MESSENGER is the first spacecraft designed to orbit the planet closest to the sun. It flew past Mercury on Jan. 14 and made the first up-close measurements since Mariner 10's final flyby in 1975.

Analyses of the data show volcanoes were involved in the formation of plains. The data also suggest the planet's magnetic field is actively produced in its core. In addition, the mission has provided the first look at the chemical composition of Mercury's surface.

- Help Save Energy Dollars at Kennedy During the July 4 Holiday Commitment from everyone at Kennedy and CCAFS can help save energy dollars. Every day, before going home after your shift, please:
- Turn off your computer, monitor and printer (if not required to remain on).
- Turn off the lights in your office if you are the last person to leave.
- Turn off the hall and hall closet lights on your way out if you are the last person to leave your area.
- Turn off or unplug any appliances in

- the office, such as coffee makers, desk lamps, fans, radios, etc.
- Turn off displays and decorative lights.
- Turn off the copier machines (including hallways) and scanners except
 the new multifunction (copier/fax)
 machines like the Xerox Workcentre.
 These machines have a sleep mode
 enabled. Turning them off will prevent the office from receiving faxes.
- Make sure that no objects interfere
 with the operation of motion sensors.
 The KSC Energy Working Group has
 received information about air conditioning vents making objects (i.e.,
 mission flags) move that are near
 motion sensors. Anything that can
 move around will prevent the motion
 sensors from shutting off the lights.
- Close the blinds on all windows.
- Sky Watch For July 4 Before the fireworks, the sky will have its own dazzling display. After sunset,



look to the west for the planets Mars and Saturn and the star Regulus in a short straight line, with Saturn highest and Mars in the middle. Also on the 4th, Earth reaches aphelion, its farthest position from the sun in 2008.

Countdown is published every Tuesday & Thursday for NASA KSC employees. Deadlines are 10 a.m. Mondays & Wednesdays. E-mail news to anita.barrett@jbosc.ksc.nasa.gov. For questions or information, e-mail or call 321-867-2815. You can also find pdf editions of Countdown on the Web at http://www.nasa.gov/centers/kennedy/news/countdown/countdown toc.html.